

Appln. No. 10/033,875

Amendment

Reply to Office Action Dated May 8, 2003

Docket No. 304-773

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled)

- 1 2. (Previously presented) Device according to claim 4, wherein said device for  
2 determining the temperature of said measuring element is at least one sensor, said  
3 sensor being placed below said hotplate.

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3. (Original) Device according to claim 2, wherein said device for determining the temperature of said measuring element is an infrared sensor.

1 4. (Currently amended) A device for determining the temperature of a cooking  
2 vessel, the cooking vessel having an underside and being placeable on a hotplate of a  
3 heating appliance, wherein at least one heating zone is defined on said hotplate and said  
4 cooking vessel is placeable on said heating zone, comprising:  
5 at least one flat measuring element, said flat measuring element having a top  
6 surface for contact with the underside of the cooking vessel, and said flat measuring  
7 element being placed on the top of said hotplate; and  
8 a device for determining the temperature of said measuring element,  
9 wherein said at least one measuring element is formed by a material coating applied in a  
10 self-adhesive manner to said top of said hotplate,  
11 wherein the at least one measuring element is separate from the device for  
12 determining the temperature of the measuring element,  
13 wherein an underside of the at least one measuring element is in a visible  
14 connection with the device for determining the temperature of the measuring element,  
15 and

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16 wherein the determination of the measuring element temperature takes place from  
17 below through the hotplate.

1 5. (Previously presented) Device according to claim 4, wherein said material  
2 coating is constituted by a printed-on color coating.

1 6. (Currently amended) A device for determining the temperature of a cooking  
2 vessel, the cooking vessel having an underside and being placeable on a hotplate of a  
3 heating appliance, wherein at least one heating zone is defined on said hotplate and said  
4 cooking vessel is placeable on said heating zone, comprising:

5 at least one flat measuring element, said flat measuring element having a top  
6 surface for contact with the underside of the cooking vessel, and said flat measuring  
7 element being placed on the top of said hotplate; and

8 a device for determining the temperature of said measuring element,  
9 wherein said at least one measuring element is formed by a separate and thin material  
10 portion fixed to said top of said hotplate,

11 wherein the at least one measuring element is separate from the device for  
12 determining the temperature of the measuring element.

13 wherein an underside of the at least one measuring element is in a visible  
14 connection with the device for determining the temperature of the measuring element,

15 and

16 wherein the determination of the measuring element temperature takes place from  
17 below through the hotplate.

1 7. (Original) Device according to claim 6, wherein said measuring element is a  
2 metal foil.

1 8. (Original) Device according to claim 6, wherein said measuring element is  
2 bonded to said top of said hotplate.

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9. (Cancelled)

10. (Previously presented) Device according to claim 4, wherein said top surface of said measuring element projects between 0.05 and 0.15 mm over said top of said hotplate.

11. (Currently amended) A device for determining the temperature of a cooking vessel, the cooking vessel having an underside and being placeable on a hotplate of a heating appliance, wherein at least one heating zone is defined on said hotplate and said cooking vessel is placeable on said heating zone, comprising:

at least one flat measuring element, said flat measuring element having a top surface for contact with the underside of the cooking vessel, and said flat measuring element being placed on the top of said hotplate; and

a device for determining the temperature of said measuring element, wherein several measuring elements are provided in the vicinity of said heating zone,

wherein the measuring elements are separate from the device for determining the temperature of the measuring elements.

wherein undersides of the measuring elements are in a visible connection with the device for determining the temperature of the measuring elements, and

wherein the determination of the measuring element temperature takes place from below through the hotplate.

12. (Previously presented) Device according to claim 11, wherein three said measuring elements are provided in the vicinity of said heating zone in a triangular arrangement.

13. (Currently amended) A device for determining the temperature of a cooking vessel, the cooking vessel having an underside and being placeable on a hotplate of a heating appliance, wherein at least one heating zone is defined on said hotplate and said

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4 cooking vessel is placeable on said heating zone, comprising:

5 ~~at least one flat measuring element, said flat measuring element having a top~~  
6 ~~surface for contact with the underside of the cooking vessel, and said flat measuring~~  
7 ~~element being placed on the top of said hotplate; and~~

8 a device for determining the temperature of said measuring element,

9 wherein said heating zone has a center and said at least one measuring element is  
10 positioned eccentrically to said center,

11 wherein the at least one measuring element is separate from the device for  
12 determining the temperature of the measuring element,

13 wherein an underside of the at least one measuring element is in a visible  
14 connection with the device for determining the temperature of the measuring element,  
15 and

16 wherein the determination of the measuring element temperature takes place from  
17 below through the hotplate.

1 14. (Currently amended) A device for determining the temperature of a cooking  
2 vessel, the cooking vessel having an underside and being placeable on a hotplate of a  
3 heating appliance, wherein at least one heating zone is defined on said hotplate and said  
4 cooking vessel is placeable on said heating zone, comprising:

5 at least one flat measuring element, said flat measuring element having a top  
6 surface for contact with the underside of the cooking vessel, and said flat measuring  
7 element being placed on the top of said hotplate; and

8 a device for determining the temperature of said measuring element,

9 wherein said heating zone has a center and none of said at least one measuring  
10 elements is positioned in said center,

11 wherein the at least one measuring element is separate from the device for  
12 determining the temperature of the measuring element,

13 wherein an underside of the at least one measuring element is in a visible  
14 connection with the device for determining the temperature of the measuring element,

15 and

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16 wherein the determination of the measuring element temperature takes place from  
17 below through the hotplate.

1 15. (Previously presented) Device according to claim 4, wherein said measuring  
2 element is at least partially made of a good heat conducting material with a low heat  
3 capacity.

16-17. (Cancelled)

1 18. (Previously presented) An electric heating appliance having a hotplate, with at  
2 least one heating zone defined on said hotplate, said heating zone being heatable by a  
3 heating device, and said heating device being positioned below said hotplate, said  
4 electric heating appliance further including a device for determining the temperature of a  
5 cooking vessel placed on said heating zone, wherein said device for determining the  
6 temperature of said cooking vessel is constructed in accordance with claim 4.

19. (Cancelled)

1 20. (Currently amended) A method for determining the temperature of a cooking  
2 vessel placed on a hotplate of a heating appliance, wherein at least one heating zone is  
3 defined on said hotplate, said cooking vessel having an underside and with said  
4 underside being placed on said heating zone, wherein the method comprises the  
5 following steps:  
6 providing at least one flat measuring element on said heating zone for contact with  
7 said underside of said cooking vessel, said flat measuring element having a top surface;  
8 setting down said cooking vessel on said heating zone in such a way that said  
9 underside of said cooking vessel comes into contact with said top of said measuring  
10 element; and  
11 ~~determination of~~ determining the temperature of said measuring element,

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12 wherein said at least one measuring element is formed by a separate and thin  
13 material portion fixed to said top of said hotplate,

14 wherein the at least one measuring element is separate from the device for  
15 determining the temperature of the measuring element,

16 wherein an underside of the at least one measuring element is in a visible  
17 connection with the device for determining the temperature of the measuring element,  
18 and

19 wherein the determining of the measuring element temperature takes place from  
20 below through the hotplate.

1 21. (Previously presented) Method according to claim 20, wherein said  
2 temperature of said measuring element is measured from below and through said  
3 hotplate.

1 22. (Previously presented) Method according to claim 21, wherein said measuring  
2 element has an underside, said underside emitting heat radiation, said heat radiation  
3 being emitted through said hotplate, said heat radiation being measured and from this  
4 measurement said temperature of said measuring element is determined.

1 23. (Previously presented) Device according to claim 6, wherein said device for  
2 determining the temperature of said measuring element is at least one sensor, said  
3 sensor being placed below said hotplate.

1 24. (Previously presented) Device according to claim 23, wherein said device for  
2 determining the temperature of said measuring element is an infrared sensor.

1 25. (Previously presented) Device according to claim 6, wherein said top surface  
2 of said measuring element projects between 0.05 and 0.15 mm over said top of said  
3 hotplate.

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1 26. (Previously presented) Device according to claim 6, wherein several  
2 measuring elements are provided in the vicinity of said heating zone.

1 27. (Previously presented) Device according to claim 6, wherein said measuring  
2 element is at least partially made of a good heat conducting material with a low heat  
3 capacity.

1 28. (Previously presented) Device according to claim 6, wherein said hotplate is at  
2 least partially made of a material with a good radiation transparency for infrared radiation,  
3 said infrared radiation at least ranging from a temperature range between room  
4 temperature and approximately 250°C to 300°C.

1 29. (Previously presented) An electric heating appliance having a hotplate, with at  
2 least one heating zone defined on said hotplate, said heating zone being heatable by a  
3 heating device, and said heating device being positioned below said hotplate, said  
4 electric heating appliance further including a device for determining the temperature of a  
5 cooking vessel placed on said heating zone, wherein said device for determining the  
6 temperature of said cooking vessel is constructed in accordance with claim 6.

1 30. (Previously presented) Device according to claim 11, wherein said device for  
2 determining the temperature of said measuring element is at least one sensor, said  
3 sensor being placed below said hotplate.

1 31. (Previously presented) Device according to claim 30, wherein said device for  
2 determining the temperature of said measuring element is an infrared sensor.

1 32. (Previously presented) Device according to claim 11, wherein said at least  
2 one measuring element is formed by a material coating applied in a self-adhesive manner  
3 to said top of said hotplate.

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1 33. (Previously presented) Device according to claim 32, wherein said material  
2 coating is constituted by a printed-on color coating.

1 34. (Previously presented) Device according to claim 11, wherein said at least  
2 one measuring element is formed by a separate and thin material portion fixed to said top  
3 of said hotplate.

1 35. (Previously presented) Device according to claim 34, wherein said measuring  
2 element is a metal foil.

1 36. (Previously presented) Device according to claim 34, wherein said measuring  
2 element is bonded to said top of said hotplate.

1 37. (Previously presented) Device according to claim 11, wherein said heating  
2 zone has a center and at least one said measuring element is positioned eccentrically to  
3 said center.

1 38. (Previously presented) Device according to claim 11, wherein said heating  
2 zone has a center and none of said at least one measuring elements is positioned in said  
3 center.

1 39. (Previously presented) Device according to claim 11, wherein said measuring  
2 element is at least partially made of a good heat conducting material with a low heat  
3 capacity.

1 40. (Previously presented) An electric heating appliance having a hotplate, with at  
2 least one heating zone defined on said hotplate, said heating zone being heatable by a  
3 heating device, and said heating device being positioned below said hotplate, said  
4 electric heating appliance further including a device for determining the temperatur of a



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5 cooking vessel placed on said heating zone, wherein said device for determining the  
6 temperature of said cooking vessel is constructed in accordance with claim 11.

1 41. (Previously presented) Device according to claim 1 wherein said device for  
2 determining the temperature of said measuring element is at least one sensor, said  
3 sensor being placed below said hotplate.

1 42. (Previously presented) Device according to claim 4 wherein said device for  
2 determining the temperature of said measuring element is an infrared sensor.

1 43. (Previously presented) Device according to claim 13 wherein said at least  
2 one measuring element is formed by a material coating applied in a self-adhesive manner  
3 to said top of said hotplate.

1 44. (Previously presented) Device according to claim 43 wherein said material  
2 coating is constituted by a printed-on color coating.

1 45. (Previously presented) Device according to claim 13 wherein several  
2 measuring elements are provided in the vicinity of said heating zone.

1 46. (Previously presented) Device according to claim 45 wherein three said  
2 measuring elements are provided in the vicinity of said heating zone in a triangular  
3 arrangement.

1 47. (Previously presented) Device according to claim 13 wherein none of said at  
2 least one measuring elements is positioned in said center.

1 48. (Previously presented) Device according to claim 13 wherein said measuring  
2 element is at least partially made of a good heat conducting material with a low heat  
3 capacity.

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1 49. (Previously presented) An electric heating appliance having a hotplate, with at  
2 least one heating zone defined on said hotplate, said heating zone being heatable by a  
3 heating device, and said heating device being positioned below said hotplate, said  
4 electric heating appliance further including a device for determining the temperature of a  
5 cooking vessel placed on said heating zone, wherein said device for determining the  
6 temperature of said cooking vessel is constructed in accordance with claim 13.

1 50. (Previously presented) Device according to claim 14, wherein said device for  
2 determining the temperature of said measuring element is at least one sensor, said  
3 sensor being placed below said hotplate.

1 51. (Previously presented) Device according to claim 50, wherein said device for  
2 determining the temperature of said measuring element is an infrared sensor.

1 52. (Previously presented) Device according to claim 14, wherein said at least  
2 one measuring element is formed by a material coating applied in a self-adhesive manner  
3 to said top of said hotplate.

1 53. (Previously presented) Device according to claim 52, wherein said material  
2 coating is constituted by a printed-on color coating.

1 54. (Previously presented) Device according to claim 14, wherein said at least  
2 one measuring element is formed by a separate and thin material portion fixed to said top  
3 of said hotplate.

1 55. (Previously presented) Device according to claim 14, wherein several  
2 measuring elements are provided in the vicinity of said heating zone.

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1 56. (Previously presented) Device according to claim 55, wherein three said  
2 measuring elements are provided in the vicinity of said heating zone in a triangular  
3 arrangement.

1 57. (Previously presented) Device according to claim 14, wherein said measuring  
2 element is at least partially made of a good heat conducting material with a low heat  
3 capacity.

1 58. (Currently amended) A method for determining the temperature of a cooking  
2 vessel placed on a hotplate of a heating appliance, wherein at least one heating zone  
3 defined on said hotplate, said cooking vessel having an underside and with said  
4 underside being placed on said heating zone, wherein the method comprises the  
5 following steps:

6 providing at least one flat measuring element on said heating zone for contact with  
7 said underside of said cooking vessel, said flat measuring element having a top surface  
8 setting down said cooking vessel on said heating zone in such a way that said underside  
9 of said cooking vessel comes into contact with said top of said measuring element; and  
10 determination of the temperature of said measuring element,

11 wherein several measuring elements are provided in the vicinity of said heating  
12 zone,

13 wherein the measuring elements are separate from the device for determining the  
14 temperature of the measuring elements,

15 wherein undersides of the measuring elements are in a visible connection with the  
16 device for determining the temperature of the measuring element, and

17 wherein the determination of the measuring element temperature takes place from  
18 below through the hotplate.

1 59. (Previously presented) Method according to claim 58, wherein said  
2 temperature of said measuring element is measured from below and through said  
3 hotplate.

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- 1 60. (Previously presented) Method according to claim 59, wherein said measuring  
2 element has an underside, said underside emitting heat radiation, said heat radiation  
3 being emitted through said hotplate, said heat radiation being measured and from this  
4 measurement said temperature of said measuring element is determined.
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